

CLAIMS:

1. A seat structure including a seat cushion having a cushioning member for a seat cushion stretched across a cushion frame, and a seat back having a cushioning member for a seat back stretched across a back frame, comprising:

5 at least one of a supporting pressure adjusting means for the seat cushion for changing a supporting pressure of said cushioning member for the seat cushion and a supporting pressure adjusting means for the seat back for changing a supporting pressure of said cushioning member for the seat back,

10 wherein the supporting pressure adjusting means for the seat cushion and the supporting pressure adjusting means for the seat back comprises:

15 a cloth spring provided on the back of the cushioning member for the seat cushion or the cushioning member for the seat back respectively and stretched across the cushion frame or the back frame; and

20 a cloth spring adjusting member to adjust tension of the cloth spring,

wherein said cloth spring adjusting member adjusts the tension of the cloth spring to change the supporting pressure of the cushioning member for the seat cushion stretched across the cushion frame or the supporting pressure of the cushioning member for the seat back stretched across the back frame.

2. The seat structure according to claim 1, comprising:

25 both of said supporting pressure adjusting means for the seat cushion and said supporting pressure adjusting means for the seat back.

3. The seat structure according to claims 1 or 2, wherein said cushioning member for the seat cushion stretched across the cushion frame and said cushioning member for the seat back stretched across the back frame are a solid knitted fabric knitted by reciprocating connecting yarn between a pair of ground knitted fabrics positioned at a prescribed distance or a stacked body of a solid knitted fabric and a urethane member.

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4. The seat structure according to any one from claims 1 to 3, wherein one end of the cloth spring composing said supporting pressure adjusting means for the seat cushion is disposed on the front of said cushion frame along the width direction and engaged with a movable frame pivotable in front and behind, and the other end of the cloth spring is connected to the rear of said cushion frame; and

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wherein said cloth spring adjusting member is structured such that it can pivot said movable frame in front and behind, and at least a portion of said cushioning member for the seat cushion is displaced in a direction protruding upward by pivoting the movable frame forward in the seated state to raise the supporting pressure.

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5. The seat structure according to any one from claims 1 to 3, wherein one end of the cloth spring provided on the back of said cushioning member for the seat back is disposed at the upper portion of said back frame along the width direction, and engaged with a movable frame pivotable in front and behind, and the other end of the cloth spring is connected to the lower portion of said back frame, and both side ends of the cloth spring are connected to side frames protruding more to the front from

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the upper portion of said back frame via a spring member, and biased in the direction pushed forward in the normal state by the spring member; and

wherein said cloth spring adjusting member is structured such that it can pivot said movable frame in front and behind, and at least a portion of said cushioning member for the seat back is displaced in a direction protruding forward by pivoting the movable frame forward in the seated state to raise the supporting pressure.

6. The seat structure according to claim 4 or 5, wherein said respective
10 cloth spring adjusting members comprise:

a motor; and

a transmitting member provided between the motor and the movable frame, transmitting the drive of the motor to said movable frame, and pivoting the movable frame in front and behind.

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7. The seat structure according to any one from claims 1 to 4 and claim 6, wherein a displacement amount in front of and behind the movable frame pivoting by said supporting pressure adjusting means for the seat cushion is controlled in the range of 5 to 15 mm in a straight distance.

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8. The seat structure according to any one from claims 1 to 3, and claims 5 and 6, wherein a displacement amount in front of and behind the movable frame pivoted by said supporting pressure adjusting means for the seat back is controlled in the range of 10 to 20 mm in a straight distance.

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9. The seat structure according to any one from claims 1 to 8, wherein

the respective spring adjusting members composing said supporting pressure adjusting means for the seat cushion or said supporting pressure adjusting means for the seat back are controlled to operate at prescribed time intervals respectively.

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10. The seat structure according to claim 9, wherein said respective cloth spring adjusting members are controlled to operate at every prescribed time interval, during a prescribed operating period of time, and at a prescribed cycle respectively.

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11. The seat structure according to any one from claims 1 to 10, wherein the seat structure is structured to provide a sitting state determining mechanism to determine the state of at least one element out of the degree of fatigue and the degree of awakeness to perform drive controlling of at least 15 one of the supporting pressure adjusting means for the seat cushion and the supporting pressure adjusting means for the seat back according to an output signal from the sitting state determining mechanism.

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12. The seat structure according to any one from claims 1 to 11, further 20 comprising a stimulus imparting means for enhancing the degree of awakeness of a seated person.

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13. The seat structure according to claim 12,
wherein the seat structure provides a sitting state determining 25 mechanism to determine the state of at least one element out of the degree of fatigue and the degree of awakeness; and

wherein said stimulus imparting means operates when at least one of the degree of fatigue and the degree of awakeness determined by said sitting state determining mechanism arrives at a prescribed degree of fatigue or awakeness.

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14. The seat structure according to claims 12 or 13, wherein said stimulus imparting means is a movable lumbar support mechanism movably provided at least in front and behind in the vicinity corresponding to the lumbar vertebra in the seat back.

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